

PDRSF 11.3.40.1 v.1

8/15/08

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USEPA SF



1445041

QUITCLAIM DEED — STATUTORY FORM  
CORPORATE GRANTOR

WASHINGTON ASPHALT CO., INC.

a corporation duly organized and existing under the laws of the State of Washington, Grantor,  
releases and quitclaims to LAKESIDE INDUSTRIES, a Washington Joint Venture

, Grantee, all right, title and interest in and to the following described real property,  
situated in Multnomah County, Oregon, to-wit:

SEE ATTACHED EXHIBIT A

(IF SPACE INSUFFICIENT, CONTINUE DESCRIPTION ON REVERSE SIDE)

The true consideration for this conveyance is \$ 0 - (Here comply with the requirements of ORS 93.030)  
Other value was the whole consideration

Done by order of the grantor's board of directors with its corporate seal, if any, affixed on 3/16, 1995

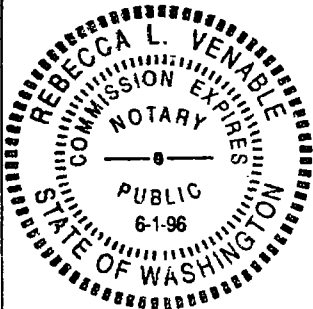
THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.830.

WASHINGTON ASPHALT CO., INC.

By Timothy Len, President  
By H.R. Waggoner, Assistant Secretary

STATE OF OREGON, County of KING

This instrument was acknowledged before me on 3/16, 1995  
by Timothy Len and H.R. Waggoner  
as President and Assistant Secretary Respectively  
of Washington Asphalt Co., Inc.



Notary Public for Oregon  
My commission expires 6/1/96

Washington Asphalt Co., Inc.  
P.O. Box 1378  
Bellevue, WA 98009  
Grantor's Name and Address  
Lakeside Industries  
P.O. Box 1379  
Bellevue, WA 98009  
Grantee's Name and Address  
After recording return to (Name, Address, Zip):  
Kenneth L. Myer, Esq.  
999 Third Avenue, 30th Floor  
Seattle, WA 98104-4088  
Until requested otherwise send all tax statements to (Name, Address, Zip):  
Lakeside Industries  
P.O. Box 1379  
Bellevue, WA 98009

SPACE RESERVED  
FOR  
RECORDOR'S USE

STATE OF OREGON, } ss.  
County of }  
I certify that the within instrument  
was received for record on the day  
of 19, at  
o'clock M., and recorded in  
book/reel/volume No. on page  
and/or as tee/tile/instru-  
ment/microfilm/reception No.  
Record of Deeds of said County.  
Witness my hand and seal of  
County affixed.

NAME TITLE  
By

EXHIBIT A

PARCEL I:

TRACT "A":

A tract of land in Section 19, Township 1 North, Range 1 East of the Willamette Meridian, in the City of Portland, County of Multnomah and State of Oregon, described as follows:  
Beginning at a point in the Northeasterly side of the St. Helens Road, North 30 degrees 00' East, 404.31 feet from the most Easterly re-entrant corner on the line between the Potter & Kittridge Donation Land Claims; thence North 30 degrees 00' East, 850.67 feet; thence South 52 degrees 30' East, 131.88 feet; thence North 30 degrees 00' East to a point in the Northerly line of N.W. Front Avenue and the true point of beginning of the tract herein described; thence North 30 degrees 00' East, 1088.11 feet to the harbor line; thence North 47 degrees 57'56" West along said harbor line 1015.02 feet to the Northerly extension of the East line of that certain tract of land conveyed to Ianthe Cook by deed recorded May 8, 1924 in Deed Book 964, page 301; thence South 30 degrees 00' West, 1334.98 feet to a point in the said Northerly line of N.W. Front Avenue; thence South 62 degrees 26'30" East, 965.87 feet to the true point of beginning; excepting therefrom the following parcels, Tracts "B" and "C"; Tract "B" being that portion at the Southwest corner conveyed to Oregon Steel Mills, an Oregon Corp., by deed recorded June 8, 1955 in Book 1726, page 305, Deed Records, said excepted portion being described as follows:

LESS AND EXCEPT TRACT "B"

Beginning at a point in the Northeasterly side of the St. Helens Road, North 30 degrees 00' East, 404.31 feet from the most Easterly re-entrant corner of the line between the Potter & Kittridge Donation Land Claims; thence North 30 degrees 00' East, 850.67 feet; thence South 52 degrees 30' East, 131.88 feet; thence North 30 degrees 00' East to a point in the Northerly line of N.W. Front Avenue; thence North 62 degrees 26'30" West along the North line of N.W. Front Avenue, 965.87 feet to an iron pipe at the most Westerly corner of a tract conveyed to the Gilpin Const. Co., by deed recorded November 4, 1941 in Book 646, page 523, Deed Records, and the true point of beginning; thence South 62 degrees 26'45" East along the Northerly line of N.W. Front Avenue a distance of 180.01 feet; thence Northwesterly on the arc of a 204.544 foot radius curve to the right, for a distance of 211.445 feet to a point on the Westerly line of the said Gilpin Tract, which point is North 30 degrees 00' East, 100.00 feet from the true point of beginning; thence South 30 degrees 00' West, 100.0 feet to the true point of beginning.

Continued on next page

LESS AND EXCEPT TRACT "C"

The portion of Tract A lying Easterly of the following described line: Beginning at the centerline monument at the intersection of Kittridge Avenue and N.W. Front Avenue; thence South 62 degrees 26'30" East along the centerline of N.W. Front Avenue 978.54 feet; thence North 27 degrees 33'30" East, 50.00 feet to the said North line thereof; thence North 62 degrees 26' 30" West, 242.20 feet along said North line to the true point of beginning of the line herein described; thence North 33 degrees 05'35" East, 152.32 feet to the beginning of a Circular Curve to the right having a radius of 310.00 feet; thence along said curve through a central angle of 47 degrees 57'18" an arc distance of 259.46 feet to a point from which the radius point bears South 8 degrees 57'07" East; thence North 30 degrees 00' East (non tangent) 747.37 feet to the 1968 harbor line of the Willamette River as shown on Record of Survey 34332 and the point of termination of the line herein described.

ALSO EXCEPTING FROM TRACT A, THE FOLLOWING DESCRIBED TRACT D:

A tract of land in Section 19, Township 1 North, Range 1 East, Willamette Meridian, County of Multnomah, State of Oregon: Beginning at a point in the Northeasterly side of the St. Helens Road, North 30 degrees 00' East, 404.31 feet from the most Easterly reentrant corner on the line between the Potter & Kittridge DLC; thence North 30 degrees 00' East 850.67 feet; thence South 52 degrees 30' East 131.88 feet; thence North 30 degrees 00' East to a point in the Northerly line of N.W. Front Avenue; thence North 62 degrees 26'30" West, 433.36 feet to the point of beginning of the herein described tract; thence North 30 degrees 40'30" East 150.75 feet; thence North 59 degrees 19'30" West, 150.08 feet; thence South 30 degrees 40'30" West 158.92 feet to the Northerly line of N.W. Front Avenue; thence South 62 degrees 26'30" East along said Northerly line of N.W. Front Avenue 152.16 feet to the point of beginning.

ALSO EXCEPTING FROM TRACT A, THE FOLLOWING DESCRIBED TRACT E:

Beginning at a point in the Northeasterly side of the St. Helens Road, North 30 degrees 00' East 404.31 feet from the most Easterly re-entrant corner of the line between the Potter and Kittridge Donation Land Claim; thence North 30 degrees 00' East 850.67 feet; thence South 52 degrees 30' East 131.88 feet; thence North 30 degrees 00' East to a point in the Northerly line of N.W. Front Avenue; thence North 62 degrees 26'30" West along the North line of N.W. Front Avenue 965.87 feet to an iron pipe at the most Westerly corner of a tract conveyed to the Gilpin Const. Co., by deed recorded November 4, 1941 in Book 646, page 523, Deed Records; thence South 62 degrees 26'45" East along the Northerly line of N.W. Front Avenue, a distance of 180.01 feet to the true point of beginning; thence Northwesterly on the arc of a 204.544 radius curve to the right, for a distance of 211.445 feet to a point on the Westerly line of said Gilpin tract; thence North 30 degrees 00' East along said Westerly

Continued on next page



line a distance of 1086.84 feet to the Harbor Line as indicated on survey by Edward Alan Hess filed November 7, 1983 as Survey No. 47333, Multnomah County Survey Records; thence South 41 degrees 41'00" East along said Harbor Line a distance of 252.81 feet; thence South 30 degrees 00' West a distance of 574.84 feet; thence ~~South~~<sup>North</sup> 48 degrees 53' West a distance of 48.97 feet; thence South 32 degrees 27'16" West a distance of 162.31 feet; thence South 31 degrees 09'57" West a distance of 196.33 feet; thence North 60 degrees 53'16" West a distance of 68.53 feet; thence North 64 degrees 33'31" West a distance of 30.10 feet; thence North 83 degrees 13'23" West a distance of 30.85 feet; thence South 73 degrees 25'31" West a distance of 9.25 feet; thence South 66 degrees 24'44" West a distance of 10.25 feet; thence South 46 degrees 55'11" West a distance of 29.16 feet; thence South 29 degrees 48'54" West a distance of 150.82 feet; thence South 19 degrees 17'18" West a distance of 45.00 feet; thence South 14 degrees 20'17" East, a distance of 57.54 feet; thence South 41 degrees 58'15" East a distance of 43.89 feet; thence South 50 degrees 12'09" East a distance of 55.37 feet; thence along a 30.00 foot radius curve to the right an arc distance of 47.12 feet to a point on the Northwesterly line of N.W. Front Avenue; thence North 62 degrees 26'30" West along said Northwesterly line to the point of beginning. ALSO including as part of said Tract E that tract bounded on the Southwest by the Harbor Line as indicated on the aforementioned Hess survey, on the Northwest by the Northerly prolongation of the Northwesterly line of the above described Tract E, on the Southeast by the Northerly prolongation of the Southwest line of the above described Tract E, and on the Northeast by the Northeasterly line of that tract described in Deed recorded October 27, 1983, Book 1702, page 311, Multnomah County Records.

PARCEL II:

A tract of land in Section 19, Township 1 North, Range 1 East, Willamette Meridian, County of Multnomah, State of Oregon. Beginning at a point in the Northeasterly side of the St. Helens Road, North 30 degrees 00' East, 404.31 feet from the most Easterly reentrant corner on the line between the Potter and Kittridge DLC; thence North 30 degrees 00' East 850.67 feet; thence South 52 degrees 30' East 131.88 feet; thence North 30 degrees 00' East to a point in the Northerly line of N.W. Front Avenue; thence North 62 degrees 26'30" West, 433.36 feet to the point of beginning of the herein described tract; thence North 30 degrees 40'30" East 150.75 feet; thence North 59 degrees 19' 30" West, 150.08 feet; thence South 30 degrees 40'30" West 158.92 feet to the Northerly line of N.W. Front Avenue; thence South 62 degrees 26'30" East along said Northerly line of N.W. Front Avenue 152.16 feet to the point of beginning.

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POTENTIAL HEALTH EFFECTS: Exposure to high fume concentrations from heated asphalt/bitumen may cause eye and respiratory tract irritation. May form hydrogen sulfide (H<sub>2</sub>S) when heated. Inhalation of H<sub>2</sub>S may be fatal. Hot product may cause thermal burns and form flammable vapors when contained.

For further health effects/toxicological data, see Section 11.

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#### 4. FIRST AID MEASURES

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EYE CONTACT: If hot product is splashed into eyes, flush with clear water and contact physician immediately.

SKIN CONTACT: Wash contact areas with soap and water. Skin contact with hot product can cause thermal burns. In this case, the contaminated area should be treated similarly to other thermal burns by cooling the affected area immediately with the coolest available water. In order to minimize traumatic injury to the skin, removal should be attempted only under the direction of a physician. If removal is attempted, mineral oil (not mineral spirits) or mineral oil ointment may be applied to soften the product to facilitate removal. (See Section 16 - Injection Injury)

INHALATION: Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself and others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

INGESTION: If more than several ounces ingested, consult a physician.

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#### 5. FIRE-FIGHTING MEASURES

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EXTINGUISHING MEDIA: CO<sub>2</sub>, foam, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Minimize breathing of gases, vapors, fumes, or decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Exposure to fire can generate toxic fumes.

COMBUSTION PRODUCTS: Fumes, smoke, carbon monoxide, hydrogen sulfide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

Flash Point C(F): > 232(450) (ASTM D-92).

Flammable Limits (approx.% vol.in air) - LEL: NE, UEL: NE

NFPA HAZARD ID: Health: 2, Flammability: 1, Reactivity: 0

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#### 6. ACCIDENTAL RELEASE MEASURES

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NOTIFICATION PROCEDURES: Report spills/releases as required to appropriate authorities. U.S. Coast Guard and EPA regulations require immediate reporting of spills/releases that could reach any waterway including intermittent dry creeks. Report spill/release to Coast Guard National Response Center toll free number (800)424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

LAND SPILL: Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

WATER SPILL: On release to water, asphalts/bitumens tend to float or sink, depending upon density; they show little tendency to disperse and are persistent in this medium, the main physical effect being adsorption to the sediment.

ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation.

PERSONAL PRECAUTIONS: See Section 8

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7. HANDLING AND STORAGE

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HANDLING: Trace amounts of H<sub>2</sub>S may be present. Keep face clear of tank and/or tank car openings. Warn personnel involved in storage and handling operations of the dangers from hydrogen sulfide, and ensure that proper operating procedures and adequate personal protection are used to prevent inhalation of hydrogen sulfide. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Storage temperature should be as far as possible below the flash point, and should not exceed 177C to avoid excessive evolution of hydrogen sulfide. Storage tanks must be adequately ventilated, and vents must not terminate in enclosed areas, or near windows or air inlets.

SPECIAL PRECAUTIONS: When heating to normal handling temperatures, avoid local overheating. Precautions must be taken against inhalation of hydrogen sulfide in case it is present in the headspace. CAUTION: Under certain circumstances sulfur compounds in hot product may form hydrogen sulfide (H<sub>2</sub>S) gas. Cooling product may continue to emit traces of H<sub>2</sub>S temporarily from entrapped or dissolved gases. H<sub>2</sub>S is a colorless, toxic, and extremely flammable gas with an odor at low concentrations of rotten eggs and a sweetish odor at high concentrations. Odor cannot be relied upon as a means of detection because the sense of smell rapidly becomes insensitive to H<sub>2</sub>S, and the H<sub>2</sub>S odor may be masked by the general odor of hot product.

EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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OCCUPATIONAL EXPOSURE LIMITS:

OSHA and ACGIH have adopted a TLV for hydrogen sulfide (H<sub>2</sub>S) of 10 ppm in air as a TWA for an 8-hour workday, with a 15 ppm STEL. OSHA further lists a ceiling concentration of 20 ppm, and a maximum peak of 50 ppm for 10 minutes once per day if no other measurable exposure occurs.

Substance Name (CAS-No.)	Source	---TWA--- ---STEL--- NOTE	
		ppm mg/m3	ppm mg/m3
ASPHALTS (PETROLEUM) (8052-42-4)			
as inh benz-sol Fumes	ACGIH	0.5	

NOTE: Limits shown for guidance only. Follow applicable regulations.

VENTILATION: Use in well ventilated area.

RESPIRATORY PROTECTION: Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the recommended exposure limit. Use positive-pressure, air-supplied respiratory protective equipment in spaces where H2S vapors may accumulate.

EYE PROTECTION: Generally eye contact with solid material is unlikely, however, when handling in liquid form, chemical type goggles should be worn.

SKIN PROTECTION: If prolonged or repeated skin contact is likely, impervious gloves should be worn. If handling hot material, use heat-resistant gloves, apron, and/or other clothing to protect skin from hot liquid. Good personal hygiene practices should always be followed.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Semi-solid

COLOR: Black

ODOR: Asphaltic

ODOR THRESHOLD-ppm: NE

pH: NA

BOILING POINT C(F): NA

MELTING POINT C(F): NA

FLASH POINT C(F): > 232(450) (ASTM D-92)

FLAMMABILITY (solids): NE

AUTO FLAMMABILITY C(F): NE

EXPLOSIVE PROPERTIES: NA

OXIDIZING PROPERTIES: NA

VAPOR PRESSURE-mmHg 20 C: < 0.1

VAPOR DENSITY: NA

EVAPORATION RATE: NE

RELATIVE DENSITY, 15/4 C: 1

SOLUBILITY IN WATER: Negligible

PARTITION COEFFICIENT: NE

VISCOSITY AT 40 C, cSt: > 8000.0

VISCOSITY AT 100 C, cSt: NA

POUR POINT C(F): NE

FREEZING POINT C(F): NE

VOLATILE ORGANIC COMPOUND: NE

DMSO EXTRACT, IP-346 (WT.%): NA

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

## 10. STABILITY AND REACTIVITY



STABILITY (THERMAL, LIGHT, ETC.): Stable.  
CONDITIONS TO AVOID: Hot product in contact with water can cause foaming or sudden evolution of steam which could cause pressure build-up and possibly rupture a tank or vessel.  
INCOMPATIBILITY (MATERIALS TO AVOID): Halogens, strong acids, alkalies, and oxidizers.  
HAZARDOUS DECOMPOSITION PRODUCTS: Product does not decompose at ambient temperatures.  
HAZARDOUS POLYMERIZATION: Will not occur.

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## 11. TOXICOLOGICAL DATA

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### ---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LDS0: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.  
DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.  
INHALATION TOXICITY (RATS): Not established  
EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.  
SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.  
OTHER ACUTE TOXICITY DATA: Fumes emitted from heated product are irritating to the eyes and respiratory tract. Dusts/particles may function as physical irritants. Symptoms of overexposure to H<sub>2</sub>S include headache, fatigue, insomnia, irritability, gastrointestinal problems, and loss of sense of smell at 100 ppm. Drowsiness, loss of consciousness, respiratory failure, or death can result from exposures above 100 ppm. Use extreme caution in enclosed spaces.

### ---SUBCHRONIC TOXICOLOGY (SUMMARY)---

No significant adverse effects were found in studies using repeated dermal applications of asphalt/bitumen to the skin of laboratory animals for 28 days at 2 g/kg. Local dermal irritation and some weight loss was observed, the latter possibly due to the effect of irritation.

### ---CHRONIC TOXICOLOGY (SUMMARY)---

Chronic mouse skin painting studies of straight run asphalt/bitumen showed no evidence of carcinogenic effects, and only localized dermal irritation was observed. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage.

### ---SENSITIZATION (SUMMARY)---

Asphalt/bitumen was not sensitizing when tested in a Buehler Skin Sensitization Assay in guinea pigs.

### ---OTHER TOXICOLOGY DATA---

Some asphalts/bitumens may contain low levels of polycyclic aromatic compounds (PACs), some of which, when made available by dilution with solvents or oils, and under conditions of poor personal hygiene and prolonged repeated contact, are suspected as a cause of skin cancer in humans.

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## 12. ECOLOGICAL INFORMATION

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### ENVIRONMENTAL FATE AND EFFECTS:

In the absence of specific environmental data for this product, this assessment is based on information for representative substances.

**ECOTOXICITY:** There are no ecotoxicity data for asphalts/bitumens. Water solubility of asphalts/bitumens is so low that no effect on aquatic organisms would be expected.

**MOBILITY:** In water, asphalts/bitumens tend to float or sink, show little tendency to disperse, and are persistent; the main physical effect being adsorption to sediment. In soil, they are immobile and inert, with adsorption the main physical process.

**PERSISTENCE AND DEGRADABILITY:** When released in the environment, some constituents of asphalts/bitumens will volatilize and be photodegraded in the atmosphere. There are no available studies of biodegradation in aquatic systems. Their use indicates that asphalts/bitumens are persistent and not subject to biodegradation.

**BIOACCUMULATIVE POTENTIAL:** Bioaccumulation of components is unlikely due to very low water solubility and high molecular weights of these substances. Bioavailability to aquatic organisms is very limited.

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## 13. DISPOSAL CONSIDERATIONS

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**WASTE DISPOSAL:** The product is suitable for processing by an approved recycling facility or can be disposed of at any government approved waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

**RCRA INFORMATION:** The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity. The unused product is not formulated with substances covered by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

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## 14. TRANSPORT INFORMATION

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### USA DOT:

SHIPPING NAME:	Elevated temperature liquid, n.o.s. (contains ASPHALTS (PETROLEUM))
HAZARD CLASS & DIV:	9
ID NUMBER:	UN3257
ERG NUMBER:	128
PACKING GROUP:	PG III
STCC:	4961614
DANGEROUS WHEN WET:	No
POISON:	No
LABEL(s):	Class 9
PLACARD(s):	Class 9

PRODUCT RQ: NA  
MARPOL III STATUS: NA  
OTHER INFORMATION: Product is not regulated when shipped at temperatures below 212 F and its flash point.

RID/ADR:  
HAZARD CLASS: 9  
PACKING GROUP: III  
LABEL: 9  
DANGER NUMBER: 99  
UN NUMBER: 3257  
SHIPPING NAME: Elevated temperature liquid, n.o.s.  
(contains ASPHALTS (PETROLEUM))  
REMARKS: NA

ADN/ADNR:  
ADNR DANGER CLASS: 9  
ADNR SUB-CLASS: 20(c)  
SHIPPING NAME: Elevated temperature liquid, n.o.s.

IMO:  
HAZARD CLASS & DIV: 9  
UN NUMBER: 3257  
PACKING GROUP: PG III  
SHIPPING NAME: Elevated temperature liquid, n.o.s.  
(contains ASPHALTS (PETROLEUM))  
LABEL(s): Class 9  
MARPOL III STATUS: NA

IATA: FORBIDDEN  
OTHER INFORMATION: Product may be shipped via air only if its temperature is both below 212 F and its flash point.

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#### 15. REGULATORY INFORMATION

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US OSHA HAZARD COMMUNICATION STANDARD: This product may be used in certain applications where temperatures may lead to generation of asphalt fumes.

EU Labeling: Product is not dangerous as defined by the European Union Dangerous Substances/Preparations Directives. EU labeling not required.

Governmental Inventory Status: All components comply with TSCA and DSL.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:  
This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS *
ASPHALT (PETROLEUM)	8052-42-4	1, 18, 19, 20, 21, 23, 25, 26

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL	6=IARC 1	11=TSCA 4	16=CA P65 CARC	21=LA RTK
2=ACGIH A1	7=IARC 2A	12=TSCA 5a2	17=CA P65 REPRO	22=MI 293
3=ACGIH A2	8=IARC 2B	13=TSCA Se	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NJ RTK
5=NTP SDS	10=OSHA Z	15=TSCA 12b	20=IL RTK	25=PA RTK
				26=RI RTK

\* EPA recently added new chemical substances to its TSCA Section 4 test rules. Please contact the supplier to confirm whether the ingredients in this product currently appear on a TSCA 4 or TSCA 12b list.

Code key:CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

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16. OTHER INFORMATION  
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USE: ROAD PAVING, SEALING, AND WATERPROOFING

NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Precautionary Label Text:

CONTAINS PETROLEUM ASPHALTS, AND CAN RELEASE HYDROGEN SULFIDE GAS WHEN HEATED.

CAUTION!

EXPOSURE TO HIGH FUME CONCENTRATIONS FROM HEATED PRODUCT MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATION. MAY FORM HYDROGEN SULFIDE (H<sub>2</sub>S) WHEN HEATED. INHALATION OF H<sub>2</sub>S MAY BE FATAL. HOT PRODUCT MAY CAUSE THERMAL BURNS AND FORM FLAMMABLE VAPORS WHEN CONTAINED.

Do not breathe fumes. Keep container closed. Use with adequate ventilation. Avoid contact with hot material. Wash thoroughly after handling.

If hot product is splashed into eyes, flush with clear water and contact



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physician immediately. In case of contact with skin, wash contact area with soap and water. In case of skin contact with hot product, cool affected area immediately with the coolest available water. Removal should be attempted only under the direction of a physician. If removal is attempted, mineral oil or mineral oil ointment may be applied to soften the product to facilitate removal. Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself and others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

For industrial use only. Not intended or suitable for use in or around a household or dwelling.

Refer to product Material Safety Data Sheet for further safety and health information.

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\*\*\*\*\*  
For Internal Use Only: MHC: 1\* 1\* NE 1\* 1\*, MPPEC: C, TRN: 280792-00,  
CMCS97: 97W463, REQ: PETROLEUM SPECIALTIES, SAFE USE: G  
EHS Approval Date: 11NOV2002  
\*\*\*\*\*

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Prepared by: ExxonMobil Oil Corporation  
Environmental Health and Safety Department, Clinton, USA



000992

# ExxonMobil

280743-00 PAVING ASPHALT PG 70-22  
MATERIAL SAFETY DATA BULLETIN

## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PAVING ASPHALT PG 70-22  
SUPPLIER: EXXONMOBIL OIL CORPORATION  
3225 GALLOWS RD.  
FAIRFAX, VA 22037

24 - Hour Health and Safety Emergency (call collect): 609-737-4411

24 - Hour Transportation Emergency:  
CHEMTREC: 800-424-9300 202-483-7616  
LUBES AND FUELS: 281-834-3296

### Product and Technical Information:

Lubricants and Specialties: 800-662-4525 800-443-9966

Fuels Products: 800-947-9147

MSDS Fax on Demand: 713-613-3661

MSDS on Internet: <http://www.exxon.com>

<http://www.mobil.com>

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: PETROLEUM ASPHALTS

### GLOBALLY REPORTABLE MSDS INGREDIENTS:

Substance Name	Approx. Wt%
BITUMEN OR VACUUM RESIDUE (8052-42-4)	100

NOTE: Hot asphalt/bitumen may slowly evolve hydrogen sulfide which can accumulate to hazardous levels in enclosed spaces.

See Section 8 for exposure limits (if applicable).

## 3. HAZARDS IDENTIFICATION



This product may be considered hazardous according to regulatory guidelines (See Section 15).

EMERGENCY OVERVIEW: Black Semi-solid. Exposure to fire can generate toxic fumes. DOT ERG No. : 128

POTENTIAL HEALTH EFFECTS: Exposure to high fume concentrations from heated asphalt/bitumen may cause eye and respiratory tract irritation. May form hydrogen sulfide (H<sub>2</sub>S) when heated. Inhalation of H<sub>2</sub>S may be fatal. Hot product may cause thermal burns and form flammable vapors when contained.

For further health effects/toxicological data, see Section 11.

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#### 4. FIRST AID MEASURES

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EYE CONTACT: If hot product is splashed into eyes, flush with clear water and contact physician immediately.

SKIN CONTACT: Wash contact areas with soap and water. Skin contact with hot product can cause thermal burns. In this case, the contaminated area should be treated similarly to other thermal burns by cooling the affected area immediately with the coolest available water. In order to minimize traumatic injury to the skin, removal should be attempted only under the direction of a physician. If removal is attempted, mineral oil (not mineral spirits) or mineral oil ointment may be applied to soften the product to facilitate removal. (See Section 16 - Injection Injury)

INHALATION: Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself and others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

INGESTION: If more than several ounces ingested, consult a physician.

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#### 5. FIRE-FIGHTING MEASURES

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EXTINGUISHING MEDIA: CO<sub>2</sub>, foam, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Minimize breathing of gases, vapors, fumes, or decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Exposure to fire can generate toxic fumes.

COMBUSTION PRODUCTS: Fumes, smoke, carbon monoxide, hydrogen sulfide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

Flash Point C(F): > 232(450) (ASTM D-92).

Flammable Limits (approx.% vol.in air) - LEL: NE, UEL: NE

NFPA HAZARD ID: Health: 2, Flammability: 1, Reactivity: 0

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## 6. ACCIDENTAL RELEASE MEASURES

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NOTIFICATION PROCEDURES: Report spills/releases as required to appropriate authorities. U.S. Coast Guard and EPA regulations require immediate reporting of spills/releases that could reach any waterway including intermittent dry creeks. Report spill/release to Coast Guard National Response Center toll free number (800)424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

LAND SPILL: Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

WATER SPILL: On release to water, asphalts/bitumens tend to float or sink, depending upon density; they show little tendency to disperse and are persistent in this medium, the main physical effect being adsorption to the sediment.

ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation.

PERSONAL PRECAUTIONS: See Section 8

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## 7. HANDLING AND STORAGE

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HANDLING: Trace amounts of H<sub>2</sub>S may be present. Keep face clear of tank and/or tank car openings. Warn personnel involved in storage and handling operations of the dangers from hydrogen sulfide, and ensure that proper operating procedures and adequate personal protection are used to prevent inhalation of hydrogen sulfide. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Storage temperature should be as far as possible below the flash point, and should not exceed 177C to avoid excessive evolution of hydrogen sulfide. Storage tanks must be adequately ventilated, and vents must not terminate in enclosed areas, or near windows or air inlets.

SPECIAL PRECAUTIONS: When heating to normal handling temperatures, avoid local overheating. Precautions must be taken against inhalation of hydrogen sulfide in case it is present in the headspace. CAUTION: Under certain circumstances sulfur compounds in hot product may form hydrogen sulfide (H<sub>2</sub>S) gas. Cooling product may continue to emit traces of H<sub>2</sub>S temporarily from entrapped or dissolved gases. H<sub>2</sub>S is a colorless, toxic, and extremely flammable gas with an odor at low concentrations of rotten eggs and a sweetish odor at high concentrations. Odor cannot be relied upon as a means of detection because the sense of smell rapidly becomes insensitive to H<sub>2</sub>S, and the H<sub>2</sub>S odor may be masked by the general odor of hot product.

EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove.

Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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##### OCCUPATIONAL EXPOSURE LIMITS:

OSHA and ACGIH have adopted a TLV for hydrogen sulfide (H<sub>2</sub>S) of 10 ppm in air as a TWA for an 8-hour workday, with a 15 ppm STEL. OSHA further lists a ceiling concentration of 20 ppm, and a maximum peak of 50 ppm for 10 minutes once per day if no other measurable exposure occurs.

Substance Name (CAS-No.)	---TWA---		---STEL---		NOTE	
	Source	ppm mg/m3	ppm mg/m3	ppm mg/m3		
-----						
BITUMEN OR VACUUM RESIDUE						
(8052-42-4)						
as inh benz-sol Fumes	ACGIH	0.5				

NOTE: Limits shown for guidance only. Follow applicable regulations.

VENTILATION: Use in well ventilated area.

RESPIRATORY PROTECTION: Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the recommended exposure limit. Use positive-pressure, air-supplied respiratory protective equipment in spaces where H<sub>2</sub>S vapors may accumulate.

EYE PROTECTION: Generally eye contact with solid material is unlikely, however, when handling in liquid form, chemical type goggles should be worn.

SKIN PROTECTION: If prolonged or repeated skin contact is likely, impervious gloves should be worn. If handling hot material, use heat-resistant gloves, apron, and/or other clothing to protect skin from hot liquid. Good personal hygiene practices should always be followed.

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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

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Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Semi-solid

COLOR: Black

ODOR: Asphaltic

ODOR THRESHOLD-ppm: NE

pH: NA

BOILING POINT C(F): NA

MELTING POINT C(F): NA

FLASH POINT C(F): > 232(450) (ASTM D-92)

FLAMMABILITY (solids): NE  
AUTO FLAMMABILITY C(F): NE  
EXPLOSIVE PROPERTIES: NA  
OXIDIZING PROPERTIES: NA  
VAPOR FRESSURE-mmHg 20 C: < 0.1  
VAPOR DENSITY: NA  
EVAPORATION RATE: NE  
RELATIVE DENSITY, 15/4 C: 1  
SOLUBILITY IN WATER: Negligible  
PARTITION COEFFICIENT: NE  
VISCOSITY AT 40 C, cSt: > 8000.0  
VISCOSITY AT 100 C, cSt: NA  
POUR POINT C(F): NE  
FREEZING POINT C(F): NE  
VOLATILE ORGANIC COMPOUND: NE  
DMSO EXTRACT, IP-346 (WT.%): NA  
NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

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#### 10. STABILITY AND REACTIVITY

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STABILITY (THERMAL, LIGHT, ETC.): Stable.  
CONDITIONS TO AVOID: Hot product in contact with water can cause foaming or sudden evolution of steam which could cause pressure build-up and possibly rupture a tank or vessel.  
INCOMPATIBILITY (MATERIALS TO AVOID): Halogens, strong acids, alkalies, and oxidizers.  
HAZARDOUS DECOMPOSITION PRODUCTS: Product does not decompose at ambient temperatures.  
HAZARDOUS POLYMERIZATION: Will not occur.

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#### 11. TOXICOLOGICAL DATA

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---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LDSO: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.  
DERMAL TOXICITY (RABBITS): Practically non-toxic (LDSO: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.  
INHALATION TOXICITY (RATS): Not established  
EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.  
SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.  
OTHER ACUTE TOXICITY DATA: Fumes emitted from heated product are irritating to the eyes and respiratory tract. Dusts/particles may function as physical irritants. Symptoms of overexposure to H2S include headache, fatigue, insomnia, irritability, gastrointestinal problems, and loss of sense of smell at 100 ppm. Drowsiness, loss of consciousness, respiratory failure, or death can result from exposures above 100 ppm. Use extreme caution in

enclosed spaces.

---SUBCHRONIC TOXICOLOGY (SUMMARY)---

No significant adverse effects were found in studies using repeated dermal applications of asphalt/bitumen to the skin of laboratory animals for 28 days at 2 g/kg. Local dermal irritation and some weight loss was observed, the latter possibly due to the effect of irritation.

---CHRONIC TOXICOLOGY (SUMMARY)---

Chronic mouse skin painting studies of straight run asphalt/bitumen showed no evidence of carcinogenic effects, and only localized dermal irritation was observed. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage.

---SENSITIZATION (SUMMARY)---

Asphalt/bitumen was not sensitizing when tested in a Buehler Skin Sensitization Assay in guinea pigs.

---OTHER TOXICOLOGY DATA---

Some asphalts/bitumens may contain low levels of polycyclic aromatic compounds(PACs), some of which, when made available by dilution with solvents or oils, and under conditions of poor personal hygiene and prolonged repeated contacted, are suspected as a cause of skin cancer in humans.

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12. ECOLOGICAL INFORMATION  
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ENVIRONMENTAL FATE AND EFFECTS:

In the absence of specific environmental data for this product, this assessment is based on information for representative substances.

ECOTOXICITY: There are no ecotoxicity data for asphalts/bitumens. Water solubility of asphalts/bitumens is so low that no effect on aquatic organisms would be expected.

MOBILITY: In water, asphalts/bitumens tend to float or sink, show little tendency to disperse, and are persistent; the main physical effect being adsorption to sediment. In soil, they are immobile and inert, with adsorption the main physical process.

PERSISTENCE AND DEGRADABILITY: When released in the environment, some constituents of asphalts/bitumens will volatilize and be photodegraded in the atmosphere. There are no available studies of biodegradation in aquatic systems. Their use indicates that asphalts/bitumens are persistent and not subject to biodegradation.

BIOACCUMULATIVE POTENTIAL: Bioaccumulation of components is unlikely due to very low water solubility and high molecular weights of these substances. Bioavailability to aquatic organisms is very limited.

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13. DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL: The product is suitable for processing by an approved recycling facility or can be disposed of at any government approved waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity. The unused product is not formulated with substances covered by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

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14. TRANSPORT INFORMATION

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## USA DOT:

SHIPPING NAME:	Elevated temperature liquid, n.o.s. (contains ASPHALTS (PETROLEUM))
HAZARD CLASS & DIV:	9
ID NUMBER:	UN3257
ERG NUMBER:	128
PACKING GROUP:	PG III
STCC:	4961614
DANGEROUS WHEN WET:	No
POISON:	No
LABEL(s):	Class 9
PLACARD(s):	Class 9
PRODUCT RQ:	NA
MARPOL III STATUS:	NA
OTHER INFORMATION:	Product is not regulated when shipped at temperatures below 212 F and its flash point.

## RID/ADR:

HAZARD CLASS:	9
PACKING GROUP:	III
LABEL:	9
DANGER NUMBER:	99
UN NUMBER:	3257
SHIPPING NAME:	Elevated temperature liquid, n.o.s.
REMARKS:	NA

## ADN/ADNR:

ADNR DANGER CLASS:	9
ADNR SUB-CLASS:	20(c)
SHIPPING NAME:	Elevated temperature liquid, n.o.s.

## IMO:

HAZARD CLASS & DIV:	9
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UN NUMBER: 3257  
PACKING GROUP: PG III  
SHIPPING NAME: Elevated temperature liquid, n.o.s.  
(contains ASPHALTS (PETROLEUM))  
LABEL(s): Class 9  
MARPOL III STATUS: NA

IATA: FORBIDDEN

OTHER INFORMATION: Product may be shipped via air only if its temperature is both below 212 F and its flash point.

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15. REGULATORY INFORMATION  
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US OSHA HAZARD COMMUNICATION STANDARD: This product may be used in certain applications where temperatures may lead to generation of asphalt fumes.

EU Labeling: Product is not dangerous as defined by the European Union Dangerous Substances/Preparations Directives. EU labeling not required.

Governmental Inventory Status: All components comply with TSCA and DSL.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:  
This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS *
ASPHALT (PETROLEUM)	8052-42-4	1, 18, 19, 20, 21, 23, 25, 26

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL	6=IARC 1	11=TSCA 4	16=CA P65 CARC	21=LA RTK
2=ACGIH A1	7=IARC 2A	12=TSCA 5a2	17=CA P65 REPRO	22=MI 293
3=ACGIH A2	8=IARC 2B	13=TSCA 5e	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NJ RTK
5=NTP SUS	10=OSHA Z	15=TSCA 12b	20=IL RTK	25=PA RTK
			26=RI RTK	

\* EPA recently added new chemical substances to its TSCA Section 4 test rules. Please contact the supplier to confirm whether the ingredients in this product currently appear on a TSCA 4 or TSCA 12b list.

Code key:CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

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16. OTHER INFORMATION  
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USE: ASPHALT

NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Precautionary Label Text:

CONTAINS PETROLEUM ASPHALTS, AND CAN RELEASE HYDROGEN SULFIDE GAS WHEN HEATED.

CAUTION!

EXPOSURE TO HIGH FUME CONCENTRATIONS FROM HEATED PRODUCT MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATION. MAY FORM HYDROGEN SULFIDE (H<sub>2</sub>S) WHEN HEATED. INHALATION OF H<sub>2</sub>S MAY BE FATAL. HOT PRODUCT MAY CAUSE THERMAL BURNS AND FORM FLAMMABLE VAPORS WHEN CONTAINED.

Do not breathe fumes. Keep container closed. Use with adequate ventilation. Avoid contact with hot material. Wash thoroughly after handling.

If hot product is splashed into eyes, flush with clear water and contact physician immediately. In case of contact with skin, wash contact area with soap and water. In case of skin contact with hot product, cool affected area immediately with the coolest available water. Removal should be attempted only under the direction of a physician. If removal is attempted, mineral oil or mineral oil ointment may be applied to soften the product to facilitate removal. Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself and others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

For industrial use only. Not intended or suitable for use in or around a household or dwelling.

Refer to product Material Safety Data Sheet for further safety and health information.

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For Internal Use Only: MHC: 1\* 1\* NE 1\* 1\*, MPPEC: C, TRN: 280743-00,  
CMCS97: 97W503, REQ: PETROLEUM SPECIALTIES, SAFE USE: G  
EHS Approval Date: 13JAN2003  
\*\*\*\*\*

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Prepared by: ExxonMobil Oil Corporation  
Environmental Health and Safety Department, Clinton, USA

**MATERIAL SAFETY DATA SHEET**

**CLEAN UP INC.**  
1829 SE Haig  
Portland, Or. 97242  
Telephone: (503) 231-7908  
For 24 Hr. Emergencies Call: Infotrac (800) 535-5053

**SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name:</b>	<b>SOLVEX</b>	<b>HMIS RATING</b>
<b>Product Description:</b>	<b>Water Base Hand Cleaner</b>	<b>Health: 2</b>
<b>Product Code:</b>	<b>S01</b>	<b>Fire: 2</b>
<b>Date Prepared:</b>	<b>MAY 9, 2008</b>	<b>Reactivity: 0</b>
		<b>PPE: C</b>

**SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>INGREDIENT</b>	<b>CAS#</b>	<b>Weight %</b>	<b>PEL</b>	<b>TLV</b>
Potassium Hydroxide	1310583	<3	N/A	2mg/m3
Dodecylbenzensulfonic Acid	27176870	<14	N/A	N/A
2-Butoxy Ethanol	111762	<4	50ppm (240mg/M3 SKIN)	25ppm (121mg.M3) SKIN
Sodium Silicate	6834920	<2	N/A	N/A
Coal Tar Naphtha		<35	100ppm	N/A

Components listed as a suspected carcinogen: None

**SECTION 3. HAZARDS IDENTIFICATION**

**Emergency Overview:** This product is combustible

**EYE CONTACT:** Can cause severe eye irritation.

**SKIN:** Brief contact may dry the skin, or cause burning or stinging sensation. Prolonged or repeated contact may irritate the skin causing dermatitis.

**INHALATION:** Overexposure may result in irritation to the respiratory tract, light headedness, drowsiness, anxiety, nausea and vomiting.

**INGESTION:** Corrosive and may cause severe and permanent damage to mouth, throat, and stomach. Nausea, vomiting, or diarrhea may result from ingestion.

**SIGNS & SYMPTOMS OF EXPOSURE:** Eye irritation, dry and cracking skin, vomiting, headache, dizziness, loss of appetite, loss of coordination.

CIVIL UP INC. SOLVEA

**SECTION 4. FIRST AID MEASURES**

- EYE CONTACT:** Immediately flush with large quantities of clean water for at least 15 minutes, lifting upper and lower eyelids. Get medical attention.
- IF ON SKIN:** Rinse exposed area with soap and clean water. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.
- IF SWALLOWED:** **DO NOT INDUCE VOMITING.** If conscious, immediately drink two glasses of water or milk. Never give anything orally to an unconscious or convulsing person. Get prompt medical attention.
- IF BREATHED:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Get prompt medical attention.

**SECTION 5. FIRE FIGHTING MEASURES**

- FLASH POINT (PMCC):** 114 Deg F.
- FLAMMABLE LIMITS IN AIR:** Not Determined.
- EXTINGUISHING MEDIA:** Dry Chemical, carbon dioxide, foam.
- SPECIAL FIRE FIGHTING PROCEDURES:** Self-contained positive pressure breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.
- UNUSUAL FIRE AND EXPLOSION HAZARDS:** Keep vapors away from possible sources of ignition.
- COMBUSTION PRODUCTS:** Oxides of Carbon and Sulfur.

**SECTION 6. SPILL OR LEAK PROCEDURES**

Steps to be taken in case material is released or spilled: Use required personal protective equipment when entering spill area. Avoid entering spill area; spilled material may be extremely slippery.

- SMALL SPILL:** Use appropriate absorbent material to absorb residual material and transfer absorbed material to containers for disposal.
- LARGE SPILL:** Stop spill at source using dam, dike or divert techniques to prevent spill from spreading. Salvage any free product and transfer to closed poly containers. Keep out of water supply.

**SECTION 7. HANDLING AND STORAGE**

Keep Container closed when not in use. Use with adequate ventilation. Prevent from freezing. If container is to be returned or recycled, make sure container is drip dry. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues, (vapor, liquid, and/or solids) all precautions given in this data sheet should be observed.

## SECTION 8. EXPOSURE CONTROLS, PERSONAL PROTECTION EQUIPMENT

**RESPIRATORY PROTECTION:** Wear a NIOSH/MSHA approved respirator appropriate for vapor concentration at a point of use.

**VENTILATION** Provide sufficient general and/or local exhaust to maintain exposure below the TLV(s).

**PROTECTIVE GLOVES:** Rubber or other impervious material with gauntlets.

**EYE PROTECTION:** Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick drench facilities in work areas.

**OTHER PROTECTIVE EQUIPMENT:** Boots, apron, lab coat or coveralls of impervious material, safe shower, eyewash.

**ENGINEERING CONTROLS:** Facilities storing or utilizing this material should be equipped with and eyewash facility and a safety shower.

**EXPOSURE GUIDELINES:** N/A

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Point:** N/A  
**Vapor Pressure:** N/A  
**Vapor Density:** N/A  
**Specific Gravity:** N/A  
**pH:** 12.5 - 13.5

## SECTION 10. STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Oxides of carbon and sulfur.

**INCOMPATIBILITY:** 3 Strong Acidic and Strong Oxidization Compounds.

**CONDITIONS TO AVOID:** None Known

## SECTION 11. TOXICOLOGICAL INFORMATION

Substance	Specie	LD50
Mineral Oil	Not Available	Not Available
Isoparaffin	Not Available	Not Available
Dibasic Esters	Rat	>10.7 mg/l (1 Hour Inhalation)
Citrus Terpenes	Muskrat	Oral 67 gm/kg

**CARCINOGENICITY:** The NTP, IARC, or OSHA does not consider this product or its components carcinogenic.

## SECTION 12. ECOLOGICAL INFORMATION

None Available For Product



**SECTION 13. DISPOSAL CONSIDERATIONS**

Consult appropriate Federal, State, or Local regulatory agencies to ascertain proper disposal procedures.

**SECTION 14. TRANSPORTATION INFORMATION**

DOT CLASS:	Combustible Liquid N.O.S. (Petroleum Distillate)
DOT HAZARD CLASS:	None
DOT IDENTIFICATION NO.	None
DOT PACKING GROUP:	III
EMERGENCY RESPONSE GUIDE NUMBER:	None

**SECTION 15. REGULATORY INFORMATION**

No Information Available.

**SECTION 16. OTHER INFORMATION**

PLEASE NOTE! Use only as directed. Do not mix with other chemicals unless advised by supplier.